In the Claims:

Please cancel claims 25-46. In addition, please cancel claims 2-3, 6-9, 15, and 19. Please amend claims 1, 4-5, 10, 13-14, 16, 20-24, and 47-48. Please add new claims 49-50. The claims are as follows.

1. (Currently amended) A method for increasing an electrical resistance of a resistor, comprising the steps of:

providing a semiconductor structure that includes the resistor; ~~and~~

~~oxidizing~~ exposing a fraction F of [[a]] an exterior surface of a surface layer of the resistor ~~with~~ to oxygen particles~~, resulting in the increasing of the electrical resistance of the resistor~~; and

oxidizing a portion of the surface layer by reacting said portion with said oxygen particles such that an electrical resistance of the resistor is increased, wherein an exterior surface of said portion consists essentially of the fraction F of the exterior surface of the surface layer, and wherein $F < 1$.

2-3. (Canceled)

4. (Currently amended) The method of claim 1, wherein a dimension of ~~the portion of~~ the resistor does not exceed about 1 micron.

5. (Currently amended) ~~The method of claim 1, wherein the oxidizing step includes:~~ A method

for increasing an electrical resistance of a resistor, comprising the steps of:

placing ~~the~~ a semiconductor structure in a chamber, wherein the semiconductor structure includes the resistor, and wherein the resistor includes a surface layer having an exterior surface;

including a gas within chamber, wherein the gas includes ~~the oxygen particles~~ oxygen-comprising molecules at an oxygen concentration~~, and wherein the oxygen particles include oxygen-comprising molecules~~;

exposing a fraction F of the exterior surface of the surface layer to the oxygen-comprising molecules;

heating ~~the fraction~~ a portion of the surface layer at a heating temperature, wherein an exterior surface of said portion consists essentially of the fraction F of the exterior surface of the surface layer, and wherein a combination of ~~an~~ the oxygen concentration and the heating temperature is sufficient to oxidize the ~~fraction~~ portion of the surface layer by reacting said portion with the oxygen-comprising molecules, wherein heating the portion of the surface layer includes directing a beam into the portion of the surface layer such that the beam causes the heating of the portion of the surface layer, and wherein the beam is selected from the group consisting a beam of radiation and a beam of particles; and

oxidizing the ~~fraction~~ portion of the surface layer by reacting said portion with the oxygen-comprising molecules, said oxidizing resulting in an increase in an electrical resistance of the resistor.

6-9. (Canceled)

10. (Currently amended) The method of claim [[9]] 5, wherein the beam is the beam of radiation, and wherein the radiation includes a laser radiation.

11. (Original) The method of claim 10, wherein $F < 1$.

12. (Original) The method of claim 10, wherein $F = 1$.

13. (Currently amended) ~~The method of claim 1, wherein F = 1, and wherein the oxidizing step includes~~: A method for increasing an electrical resistance of a resistor, comprising the steps of:

providing a plasma chamber that includes a first electrode and a second electrode;

disposing ~~the~~ a semiconductor structure between the first electrode and the second electrode, wherein the semiconductor structure includes the resistor;

including a neutral gas within plasma chamber, wherein the neutral gas includes oxygen-comprising molecules;

ionizing the neutral gas to generate a plasma gas between the first electrode and the second electrode, wherein the plasma gas includes ~~the oxygen particles as~~ oxygen ions derived from the oxygen-comprising molecules;

accelerating with a direct current voltage the oxygen ions from the first electrode toward the second electrode, wherein the accelerated oxygen ions strike the resistor with an energy that is at least a threshold energy for oxidizing ~~the~~ a surface layer of the resistor; and

oxidizing ~~the~~ a surface layer of the resistor with the oxygen ions striking and penetrating an exterior surface of the surface layer, wherein said oxidizing increases an electrical resistance

of the resistor is increased.

14. (Currently amended) The method of claim 13, wherein ~~the oxygen-comprising molecules are selected from the group consisting of molecular oxygen (O_2), nitrous oxide (N_2O), carbon dioxide (CO_2), and carbon monoxide (CO)~~ a dimension of the resistor does not exceed about 1 micron.

15. (Canceled)

16. (Currently amended) ~~The method of claim 1, wherein the oxidizing step comprises:~~ A method for increasing an electrical resistance of a resistor, comprising the steps of:

forming an anodization electrical circuit which includes: a DC power supply, an electrolytic solution comprising oxygen, the resistor partially immersed in the electrolytic solution such that a fraction F of a surface layer of the resistor is immersed in the electrolytic solution, and a cathode partially immersed in the electrolytic solution, wherein the resistor is electrically coupled to a positive terminal of the DC power supply such that the resistor serves as an anode, and wherein the cathode is electrically coupled to a negative terminal of the DC power supply;

activating the DC power supply such that the DC power supply generates a voltage output, wherein the voltage output causes an electrolytic reaction in the electrolytic solution near the resistor, and wherein the electrolytic reaction generates oxygen ions from the oxygen in the electrolytic solution~~, and wherein the oxygen particles include the oxygen ions~~; and

oxidizing ~~the fraction~~ a portion of the surface layer by reacting said portion with the oxygen ions such that an electrical resistance of the resistor is increased, wherein an exterior surface of said portion consists essentially of the fraction F of an exterior surface of the surface layer.

17. (Original) The method of claim 16, wherein $F < 1$.

18. (Original) The method of claim 16, wherein $F = 1$.

19. (Canceled)

20. (Currently amended) ~~The method of claim 1, wherein the oxidizing step includes~~ A method for increasing an electrical resistance of a resistor, comprising the steps of:

providing a chemical solution which includes the oxygen particles, wherein the oxygen particles are selected from the group consisting of oxygen-comprising liquid molecules, oxygen ions, and an oxygen-comprising gas dissolved in the chemical solution under pressurization;

immersing ~~the~~ a semiconductor structure in the chemical solution, wherein the semiconductor structure includes the resistor, and wherein a fraction F of a surface layer of the resistor is immersed in the electrolytic solution; and

oxidizing ~~the fraction~~ a portion of the surface layer of the resistor by chemically reacting the oxygen particles with the ~~fraction~~ portion of the surface layer such that an electrical resistance of the resistor is increased, wherein an exterior surface of said portion consists essentially of the

fraction F of an exterior surface of the surface layer.

21. (Currently amended) The method of claim 20, wherein ~~the resistor includes an electrically resistive material selected from the group consisting of copper, tungsten, aluminum, titanium, nitrides thereof, and alloys thereof~~ $F < 1$.

22. (Currently amended) The method of claim 20, wherein ~~the chemical solution is selected from the group consisting of hydrogen peroxide, ferric nitrate, and ammonium persulphate~~ $F = 1$.

23. (Currently amended) ~~The method of claim 1, further comprising:~~ A method for increasing an electrical resistance of a resistor, comprising the steps of:

providing a predetermined target resistance in terms of a value R_t and a tolerance ΔR_t for the electrical resistance of the resistor; ~~and~~

providing a semiconductor structure that includes the resistor;

exposing a fraction F of an exterior surface of a surface layer of the resistor to oxygen particles; and

oxidizing a portion of the surface layer by reacting said portion with said oxygen particles, wherein said oxidizing increases an electrical resistance of the resistor, wherein an exterior surface of said portion consists essentially of the fraction F of the exterior surface of the surface layer, and

testing the resistor during the oxidizing step to determine whether the electrical resistance of the resistor is within $R_t \pm \Delta R_t$.

24. (Original) The method of claim 23, wherein if during the testing step the electrical resistance of the resistor is determined to not be within $R_t \pm \Delta R_t$, ~~and~~ then the method further ~~comprising~~ comprises:

iterating such that each iteration of the iterating includes additionally executing the exposing and oxidizing steps and additionally testing the resistor during the oxidizing step to determine whether R_2" is within $R_t \pm \Delta R_t$, wherein R_2" is a latest value of the electrical resistance of the resistor as determined by said testing; and

ending the iterating if R_2" is within $R_t \pm \Delta R_t$ or if $(R_2"-R_1)(R_t-R_2") < 0$, wherein R_1 is [[an]] a latest value of the determined electrical resistance of the resistor immediately prior to said testing ~~the oxidizing of the portion of the resistor, and wherein R_2" is a latest value of the electrical resistance of the resistor as determined by the testing~~.

25-46. (Canceled)

47. (Currently amended) A method for increasing an electrical resistance of a resistor, comprising the steps of:

providing a semiconductor structure that includes the resistor; ~~and~~

~~nitridizing~~ exposing a fraction F of [[a]] an exterior surface of a surface layer of the resistor ~~with~~ to nitrogen particles~~, resulting in the increasing of the electrical resistance of the resistor~~; and

nitridizing a portion of the surface layer by reacting said portion with said nitrogen particles such that an electrical resistance of the resistor is increased, wherein an exterior surface

of said portion consists essentially of the fraction F of the exterior surface of the surface layer.

48. (Currently amended) An electrical structure, comprising[[:]] a semiconductor structure that includes a resistor~~; and nitrogen particles in an nitridizing reaction with a fraction F of a surface layer of the resistor, wherein the nitridizing reaction increases an electrical resistance of the resistor~~,

wherein the resistor includes a surface layer and a subsurface layer,

wherein the subsurface layer is in direct mechanical contact with the surface layer,

wherein an exterior surface of the resistor includes an exterior surface of the surface layer,

wherein the exterior surface of the resistor does not include any exterior surface of the subsurface layer,

wherein the subsurface layer includes an unnitridized material,

wherein the surface layer comprises an nitridized portion that includes an nitridized material,

wherein the surface layer comprises an unnitridized portion that includes the unnitridized material and does not include the nitridized material,

wherein the exterior surface of the surface layer includes an exterior surface of the nitridized portion and an exterior surface of the unnitridized portion,

wherein the nitridized portion is a fraction F of the surface layer such that $F<1$ and F has a value equal to a ratio of the surface area of the exterior surface of the nitridized portion to the surface area of the exterior surface of the surface layer,

wherein nitrogen particles distinct from the nitridized material are present at the exterior

surface of the nitridized portion and said nitrogen particles are not present at the exterior surface of the unnitridized portion,

wherein an electrical resistance of the resister having the nitridized material exceeds an electrical resistance that the resistor would have if the nitridized material were replaced by an equivalent volume of the unnitridized material, and

wherein the unnitridized portion does not include the nitrogen particles.

49. (New) The method of claim 23, wherein $F < 1$.

50. (New) The method of claim 23, wherein $F = 1$.